

SEQUENCE LISTING

<110> BURKART, MICHAEL D.
LACLAIR, JAMES J.

<120> COMPOSITIONS AND METHODS FOR ANALYSIS AND MANIPULATION OF
ENZYMES IN BIOSYNTHETIC PROTEOMES

<130> 26774-14255/US

<140> 10/561,108

<141> 2006-05-11

<150> PCT/US2004/019568

<151> 2004-06-17

<150> 60/479,344

<151> 2003-06-17

<160> 22

<170> PatentIn version 3.5

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<223> Description of Artificial Sequence: Synthetic
consensus sequence

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<221> MOD_RES

<222> (2)..(2)

<223> Leu, Ile, Val, Met, Phe, Tyr, Ser, Thr, Ala or Cys

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<221> MOD_RES

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<223> Gly, Asn or Gln

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<222> (4)..(4)

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<223> Asp, Asn, Glu, Lys, His or Ser

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Glu Leu Gly Gly Asp Ser Ile Lys Ala Ile Gln Val Ser Thr Arg Leu
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peptide

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peptide

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<210> 20
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peptide

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<210> 21
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<212> PRT
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<400> 21

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Leu | Gly | Gly | His | Ser | Leu | Lys | Ala | Thr | Leu | Leu | Ile | Ala | Lys | Val |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

<210> 22

<211> 80

<212> PRT

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<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 22

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| Lys | Lys | Lys | Ala | Leu | Leu | Val | Val | Ser | Phe | Gly | Thr | Ser | Tyr | Lys | Asp |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Cys | Glu | Lys | Asn | Ile | Val | Ala | Cys | Glu | Arg | Asp | Leu | Ala | Ala | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Pro | Asp | Arg | Asp | Leu | Phe | Arg | Ala | Phe | Thr | Ser | Gly | Met | Ile | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Lys | Leu | Arg | Gln | Arg | Asp | Gly | Ile | Asp | Ile | Asp | Thr | Pro | Leu | Gln |
| | 50 | | | | | 55 | | | | 60 | | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Leu | Gln | Lys | Leu | Ala | Ala | Gln | Gly | Tyr | Gln | Asp | Val | Ala | Ile | Gln |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |